REMARKS/ARGUMENTS

Claims 1, 6-18, 20-30, 40 and 42-51 are pending in this application. By this Amendment, Claims 1, 20, 40 and 46 are amended, Claim 51 is added and Claim 19 is cancelled. Reconsideration in view of the above amendments and the following remarks is respectfully requested.

Claims 1, 40 and 46 have been amended to clarify that the base member is substantially rigid, is not user conformable or mouldable in boiling water and is unitarily moulded from a rigid plastics material. These amendments are supported by original claim 19 and paragraph [0063].

Claims 1, 40 and 46 has also been amended to clarify that the channel of the base is defined by a substantially rigid inner flange, a substantially rigid outer flange and a web connecting the flanges. Basis for the presence of the flanges may be found in original claim 26. That the flanges are substantially rigid follows from the fact that they are formed from a rigid material.

Claim 1 has been amended o clarify that the teeth engaging element encapsulates each channel. Basis for this amendment may be found at paragraph [1011].

Claim 1 has still further been amended to clarify that the compressible channels are defined in or near terminal ends of the base member and extend through a posterior outer face to a posterior inner face of the base member. Basis for the amendment may be found at paragraph 25 and the posterior location is clearly shown in the figures.

NOVELTY

Claims 1, 10, 13, 14, 17, 19-21, 25-29, 40 and 42-45 stand rejected under 35 U.S.C. §102(e) over Kittelsen et al. (U.S. Patent No. 6,691,710). This rejection is respectfully traversed

for at least the reasons set forth below.

The Examiner asserts that Kittelsen discloses a base member moulded as a single component as Kittelsen discloses the materials are substantially mechanically interlocked as well as encapsulated, thereby preventing the possibility of delamination or separation of the materials and further that these features mechanically combine to form a single unitary structure that is moulded as a single component by encapsulation material (170).

The Examiner asserts that the base of Kittelsen comprises at least four components, framework (86), the reverse bit plate fulcrum (106), the traction pads (114) and the encapsulating material (170). The first component identified by the Examiner is framework (86), formed in a first injection moulding shot from a non-softenable flexible material to assist in maintaining the shape of the mouthguard. A suitable material is polypropylene. The second injection moulding component is that of the reverse bit plate or fulcrum (106) which is hard and durable and is suitably made of HDPE. The traction pads (114) are the third component made from a durable and elastomeric material that deforms somewhat when the jaws are closed and cushion the teeth of the lower jaw (see column 5 lines 36-43). The fourth component comprises encapsulating material (170) which is softenable and forms the walls of a channel of the mouth guard.

First, the applicant respectfully disagrees that the four part unit of Kittelsen can be considered to have been moulded as a single component. Nevertheless, to expedite prosecution only, the claims have been clarified to recite that the base is unitarily moulded from a rigid plastic material that is not user conformable or mouldable in boiling water. In other words, each part of the base is formed from a rigid plastic material that is not user conformable or mouldable in boiling water. This is in contrast to the four part base member of Kittelsen in which only the

framework (86) is formed from a rigid material. The materials from which the other component of Kittelsen are formed are carefully chosen for their different physical properties so that each provide a very different intended function. In particular, the encapsulation material (170) is intentionally softenable when placed in boiling water (column 7 lines 11-17).

Claim 1 has still further been clarified to show that the base has substantially rigid flanges that define the teeth receiving channel. This is in contrast to Kittelsen whereby the teeth receiving channels and labial wall (172) and buccal wall (174) are formed from the soft enable encapsulation material (170). Further at column 7 lines 29-33, Kittelsen states "Because there are no rigid lingual or buccal walls in the appliance, 70, the mouthguard will fit any width of molar 22 or mouth" (emphasis added).

On the other hand the appliance of the present invention teaches the desirability of rigid flanges such that "the hard base member forces the layer of thermoplastic material against the teeth where it conforms to the contours of the teeth" (see paragraph [0118]). Thus, Kittelsen does not only not disclose rigid flanges, it teaches away from such a feature as recited in the claims.

An alternative construction of Kittelsen is that it has a rigid base 86 and a softer teeth engaging element (170) encapsulating the base member 86. However, such a construction still does not teach the features of the present claims as the framework 86 does not have inner and outer flanges defining a teeth engaging channel. The absence of flanges in framework 86 may be clearly seen in figure 9 of Kittelsen.

As discussed above, Kittelsen does not disclose a substantially rigid base member unitarily moulded from a rigid plastics material that is not user conformable or mouldable in hot

water and has at least one channel defined by a substantially rigid inner flange, a substantially rigid outer flange and a web connecting the flanges, within which at least one upper or lower row of teeth of a user can be received, as recited in independent Claims 1, 40 and 46. Claims 10, 13, 14, 17, 20, 21, 25 – 29 and 42-45 depend from either independent Claims 1 or 40, and are also believed to be novel over Kittelsen for at least the reasons discussed above. Withdrawal of the rejection of the claims under 35 U. S. C. §102 is respectfully requested.

NON-OBVIOUSNESS

Kittelsen et al. '710 and Kittelsen et al. '301

Claims 6-8, 15, 16 and 30 stand rejected under 35 U. S. C. §103 as being unpatentable over Kittelsen (U.S 6,691,710) in view of Kittelsen et al (U.S. 5,152,301). This rejection is respectfully traversed for at least the reasons set forth below.

The Examiner asserts that Kittelsen ('710) substantially discloses the invention as claimed. However, as explained above, the applicant respectfully disagrees with such an assertion and respectfully submits that such a combination of references does not arrive at the claimed subject matter. In other words, neither Kittelsen reference discloses a substantially rigid base member unitarily moulded from a rigid plastics material that is not user conformable or mouldable in hot water and has at least one channel defined by a substantially rigid inner flange, a substantially rigid outer flange and a web connecting the flanges, within which at least one upper or lower row of teeth of a user can be received, as recited in independent Claim 1, from which Claims 6-8, 15, 16 and 30 depend. Moreover, the Examiner notes that Kittelsen '301 teaches air channels extending from an inner to an outer face. However, the air channels of Kittelsen '301 do not extend from outer to inner posterior faces in a sideways manner as

presently claimed. Kittelsen also does not show this feature.

Therefore, in light of the above, a combination of the Kittelsen references would not have resulted in the claimed features. Accordingly, Applicant submits that claims 6 -8, 15 16 and 30 are patentable over the cited references and that the rejection be withdrawn.

Kittelsen '710, Kittelsen '301 and Adell

Claims 9, 12, 46, 47, 48, 49 and 50 stand rejected over Kittelsen '701, Kittelsen '301 and further in view of Adell. This rejection is respectfully traversed for at least the reasons set forth below.

The Examiner considers that Kittelsen's ('710) invention as modified by Kittelsen ('310) discloses all of the claimed limitations except for at least one frontal open channel, and relies on Adell to teach the missing channel. However, for the reasons provided above, applicant respectfully submits that this is not the case. That is, Adell does not teach the claimed features discussed above that are missing in the Kittelsen references. In particular, Adell does not teach a substantially rigid base member unitarily moulded from a rigid plastics material that is not user conformable or mouldable in hot water and has at least one channel defined by a substantially rigid inner flange, a substantially rigid outer flange and a web connecting the flanges, within which at least one upper or lower row of teeth of a user can be received, as recited in independent Claims 1 and 46. It follows that such a combination of references would not have arrived at the features recited in claims 9, 12, 47, 48, 49 and 50, each of which depends from Claims 1 or 46. Withdrawal of the rejection of the claims under 35 U.S.C. §103 is requested.

Kittelsen et al. (U.S. 6,691,710)

Claims3 11, 18, 22-24, have been rejected under 35 U. S. C. 103(a) as being unpatentable over Kittelsen et al. (U.S. 6,691,710). This rejection is respectfully traversed for the reasons set forth below.

The Examiner considers that Kittelsen's ('710) discloses all of the claimed limitations except for the features as recited in Claims 11, 18, 22-24, and asserts that it would have been obvious for a person of ordinary skill in the art to combine Kittelsen '710 with the missing features. However, for at least the reasons provided above, applicant respectfully submits that this is not the case. In particular, Kittelsen '710 does not disclose a substantially rigid base member unitarily moulded from a rigid plastics material that is not user conformable or mouldable in hot water and has at least one channel defined by a substantially rigid inner flange, a substantially rigid outer flange and a web connecting the flanges, within which at least one upper or lower row of teeth of a user can be received, as recited in independent Claim 1, from which Claims 11, 18 and 22-24 depend. Withdrawal of the rejection of the claims is respectfully requested.

CONCLUSION

For at least the reasons set forth above, it is respectfully submitted that the above-identified application is in condition for allowance. Favorable reconsideration and prompt allowance of the claims are respectfully requested.

Should the Examiner believe that anything further is desirable in order to place the application in even better condition for allowance, the Examiner is invited to contact Applicant's undersigned attorney at the telephone number listed below.

Respectfully submitted,

CAESAR, RIVISE, BERNSTEIN,
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October 16, 2009

By 

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Please charge or credit our Account No. 03-0075 as necessary to effect entry and/or ensure consideration of this submission.

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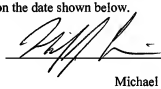
Date: October 16, 2009 Signature: 

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